

REMARKS

An Office Action was issued in the subject application on March 22, 2004. The Office Action recited the following rejections:

- claims 1 and 2 rejected 35 U.S.C. § 112;
- claims 1–4 rejected under 35 U.S.C. § 102;
- claims 1–4 rejected under 35 U.S.C. § 103; and
- claims 5–10 objected to as being dependent upon a rejected base claims but would be allowable if rewritten in independent form.

Summarizing this Amendment, claims 1 and 5 have been amended, and claims 3 and 4 have been canceled. Claims 1, 2, 5–11 remain in the application. Reconsideration of the subject application as amended is respectfully requested.

REJECTIONS UNDER 35 U.S.C. § 112

Claims 1 and 2 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Namely, the use of the phrase “comprising only” was objected to.

Accordingly, claim 1 has been amended by replacing “comprising only” with --consisting of--. This language is also used in claim 5 as amended. It is respectfully submitted that the amendment of claim 1 overcomes this rejection.

REJECTIONS UNDER 35 U.S.C. § 102

Claims 1–4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,954,334 to Pugh.

Claims 2 and 3 have been canceled, rendering the rejections thereon moot. Claim 1 has been amended with the language --consisting of--. Applicant traverses the rejections on remaining claims 1 and 2.

Requirements for Anticipation

The Federal Circuit stated in *W.L. Gore & Associates v. Garlock, Inc.* [721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983)] that an anticipation rejection under 35 U.S.C. § 102 “requires the disclosure of a single prior art reference of each element of the claim under consideration.” It

is not enough, however, that the prior art reference disclose all the claimed elements in isolation. Rather, as stated by the Federal Circuit, “[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim” [*Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984)]. Likewise, the Court of Customs and Patent Appeals (CCPA) stated in *In re Wilder* [429 F.2d 447, 166 USPQ 545, 548 (C.C.P.A. 1976)]:

Simply stated, a prior publication or patent description will be considered as anticipatory when its disclosure is at once specific and enabling with regard to the particular subject matter at issue. In effect, a *prima facie* case is made out whenever a reference is shown to contain a disclosure which is specific as to every critical element of the appealed claims.

In other words, a *prima facie* case of anticipation is established when the Patent Office provides:

- a) a single reference
- b) that teaches or enables
- c) each of the claimed elements (arranged as in the claim)
- d) expressly or inherently
- e) as interpreted by one of ordinary skill in the art.

If any one of these elements is not present, the *prima facie* case of anticipation is not established. In the instant case, it is respectfully submitted that the Pugh patent fails to meet these requirements.

The Cited Reference

U.S. Patent No. 4,954,334 to Pugh discloses a composition consisting of 50% by weight boric acid powder and 50% by weight of aluminum ammonium sulfate (see column 3, lines 20–23).

The Present Invention

The present invention as set forth in independent claim 1 as amended a foot powder consisting of:

about 40% to about 60% by weight of boric acid powder; and
about 40% to about 60% by weight of sublimed sulfur powder.

Claim 2 recites that the ratio is about 1:1.

Discussion

Provided below are entries from The Merck Index (Ninth Edition) for aluminum ammonium sulfate (entry 319) as taught by Pugh and for sublimed sulfur (entry 8773) as recited in claim 1:

319. Aluminum Ammonium Sulfate. Burnt ammonium alum; exsiccated ammonium alum. $\text{AlH}_4\text{NO}_2\text{S}_2$; mol wt 237.14. Al 11.38%, H 1.70%, N 5.91%, O 53.98%, S 27.04%. $\text{AlNH}_4(\text{SO}_4)_2$. Prep: *Gmelin's, Aluminum* (8th ed) 35B, pp 508-515 (1934). Crystal structure of dodecahydrate: Larson, Cromer, *Acta Cryst.* 22, 793 (1967).

About 97-98% pure, the balance is chiefly excess Al_2O_3 . White powder. One gram dissolves in about 20 ml cold, 1.5 ml boiling water, usually incompletely; practically insol in alcohol. *Keep well closed.*

Dodecahydrate, *ammonium alum*. It is about 99.5% pure. Colorless crystals, white granules or powder; styptic taste. d 1.65. mp 94.5°. At about 250° becomes anhyd; decomposes above 280°. One gram dissolves in 7 ml water, 0.5 ml boil. water; freely soluble in glycerol; practically insol in alc. The aq soln is acid to litmus; pH of 0.05 molar soln 4.6.

USE: Purifying drinking water; in baking powders; dyeing and printing fabrics; manuf pigments, lakes, artificial gems, paper, vegetable glue, marble and porcelain cements; fire-proofing; tanning; electrolytic copperplating. *See also* Aluminum Potassium Sulfate.

THERAP CAT: Astringent, styptic.

THERAP CAT (VET): Astringent, styptic.

8773. Sulfur, Pharmaceutical. Three forms of sulfur of 99.5% purity or better are recognized in pharmacy. *Precipitated sulfur*, also known as milk of sulfur, made by boiling sulfur with lime and pptg the filtered soln with hydrochloric acid. *Sublimed sulfur*, also known as flowers of sulfur. *Washed sulfur*, made by treating sublimed sulfur with ammonia to dissolve impurities, particularly arsenic (the U.S.A. sulfur contains practically no arsenic) and to remove traces of acid.

Sublimed and washed sulfur are in the form of a fine, yellow cryst powder, with only a faint odor and taste. Both are slowly and usually incompletely sol in carbon disulfide. Precipitated sulfur is in the form of a very fine, pale yellow, amorphous or microcryst powder, odorless and tasteless. It dissolves much more quickly and usually more completely in carbon disulfide than the other forms. Solv in anhydr lanolin at 45°: 0.38%; in olive oil at 15°: 2.2%, at 30°: 4.1%, at 100°: 20.0%.

THERAP CAT: Precipitated and sublimed sulfur as scabicides.

THERAP CAT (VET): Externally: antiseptic and parasiticidal; in lotions, ointments and dips, often with lime. Internally: has been used as a laxative, coccidiostat.

It is respectfully submitted that aluminum ammonium sulfate is not the same as or equivalent to sublimed sulfur powder. In addition, Pugh is silent as to utilizing sublimed sulfur powder in his composition.

Accordingly, it is respectfully submitted that the Pugh patent fails to teach or enable each of the claimed elements as arranged in independent claim 1, either expressly or inherently, as interpreted by one of ordinary skill in the art. Accordingly, it is respectfully submitted that the Pugh patent does not anticipate claims 1 and 2 and, therefore, that these claims are patentable.

REJECTIONS UNDER 35 U.S.C. § 103

Claims 1–4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 1,029,203 to Loewenthal and U.S. Patent No. 1,783,695 to Blumenberg.

Claims 3 and 4 have been canceled, rendering the rejections thereon moot. Applicant traverses the rejections on claims 1 and 2.

Requirements for Obviousness

The Federal Circuit stated in *In re Oeticker* [977 F.2d 1443, 24 USPQ 2d 1443 (Fed. Cir. 1992)], “[i]f examination at the initial stage does not produce a prima facie case of unpatentability, then without more the applicant is entitled to grant of the patent.” The CCPA interpreted prima facie obviousness in *In re Lintner* [458 F.2d 1013, 173 USPQ 560, 562 (C.C.P.A. 1972)] as follows:

In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed substitution, combination or other modification.

In *In re Rinehart* [531 F.2d 1048, 189 USPQ 143 147 (C.C.P.A. 1976)], the CCPA added that the prima facie case requires that the teachings of the reference “appear to have suggested the *claimed subject matter*.” In view of these decisions, a prima facie case of obviousness is established when the Patent Office provides:

- a) one or more references
- b) that were available to the inventor and
- c) that teach
- d) a suggestion to combine or modify the references,
- e) the combination or modification of which would appear to be sufficient to have made the claimed invention obvious to one of ordinary skill in the art.

If any one of these elements is not present, the prima facie case of obviousness is not established. In the instant case, it is respectfully submitted that the cited references fail to meet these requirements.

The Cited References

U.S. Patent No. 1,029,203 to Loewenthal discloses an insectifuge for driving cockroaches from a locality. The insectifuge includes powdered borax, dry common salt, and flour of sulfur. (See lines 7–10, 46–49, and 66–68.)

U.S. Patent No. 1,783,695 to Blumenberg discloses a composition for dusting or spraying plants to destroy insect parasites, moulds, or fungi. The composition includes a powdery mixture

of sulphur and boric acid produced by the sublimation of the mixture of sulphur and boric acid, at a ration of 90% sulphur and 10% boric acid. (See lines 1–4 and 66–74.)

The Present Invention

The present invention as set forth in independent claim 1 as amended a foot powder consisting of:

about 40% to about 60% by weight of boric acid powder; and
about 40% to about 60% by weight of sublimed sulfur powder.

Claim 2 recites that the ratio is about 1:1.

Discussion

Clearly, neither Loewenthal nor Blumenberg teaches a foot powder. In addition, neither Loewenthal nor Blumenberg teaches a composition consisting of about 40% to about 60% by weight of boric acid powder about 40% to about 60% by weight of sublimed sulfur powder. Furthermore, it is respectfully submitted that the Loewenthal and Blumenberg patents teach nonanalogous art—namely, insecticides—that is sufficiently incongruent with the foot powder of the claim 1 that a person having ordinary skill in the art would not be motivated to modify their teachings to come up with the foot powder of claim 1. Moreover, neither the Loewenthal patent nor Blumenberg patent provides any suggestion of how to modify their respective teachings to come up with a foot powder with the relationship recited in claim 1. Therefore, the Loewenthal and Blumenberg patents each fail to teach a suggestion of how to combine or modify the references, the combination or modification of which would appear to be sufficient to have made the claimed invention obvious to one or ordinary skill in the art.

Accordingly, it is respectfully submitted that the invention as set forth in claims 1 and 2 would not have been obvious to one having ordinary skill in the art at the time the invention was made in view of either of the Loewenthal or Blumenberg patents, and that claims 1 and 2 are patentable.

ALLOWABLE CLAIMS

Claims 5–11 have been objected to as being dependent upon a rejected base claims but would be allowable if rewritten in independent form including all of the limitation of the base claim and any intervening claims. Applicant notes that there are eleven claims in the application as filed, not ten. Claim 11 is found on page 5 of the application as filed.

Independent claim 5 has been rewritten in independent form with the limitations of claim 1 as amended. It is respectfully submitted that claims 5–11 are in condition for allowance.

CLOSING REMARKS

It is respectfully submitted that the subject application, including claims 1, 2, 5–11, is in condition for allowance. Confirmation of the allowance is respectfully requested.

The Examiner is invited to contact the undersigned if there are any issues which remain, preventing the allowance of the application.

Respectfully submitted,



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